REMARKS

The application includes claims 1-29 and 31.

Claim 11 has been improperly objected to as failing to further limit claim 1.

Contrary to the Examiner's position, claim 11 requires that the agitating or masticating step be performed during the permitting step. With reference to claim 1, it is clear that there is a "permitting" step, and claim 11 clearly further limits claim 1 by requiring two of the steps to be performed simultaneously or at overlapping times.

The Examiner has improperly inferred that the applicant is reciting a sequential process. Claim 1 does not require the processes to be performed in sequence, and clearly permits the "permitting" and "agitating or masticating" steps to be performed in sequence or at the same time. Claim 11 further limits claim 1 by requiring the two steps to be performed simultaneously or at overlapping times. While it is clear that the agitating and masticating must be performed on a blend which is formed in the permitting step, it should be recognized that the blend is formed from chemical agent and polymer, and that the blend does not require all of the chemical agent to be associated with all of the polymer. Rather, as some of the chemical agent forms a blend with some of the polymer, that blend can be agitated or masticated to break up the blend into particles, while more blend is being formed from more chemical agent and more polymer.

In view of the above, withdrawal of the objection is in order.

Claim 1 has been improperly rejected under 35 U.S.C. 112, second paragraph

The Examiner's position is that the transitional phrase "comprising the steps of" is indefinite and that the claim should have an alternative transitional phrase "comprising the sequential steps of". This position is simply wrong.

As the Examiner will recognize, "comprising the steps of" is a well recognized and accepted transitional phrase used in method claims examined by the USPTO.

With regard to an ordering of steps, the Examiner will recognize that a blend cannot be permitted to be formed without the chemical agent and polymer from being combined. However, the combining and permitting steps might be performed in sequence or at the same time. Similarly, as discussed in detail above, the agitating or masticating step cannot produce the free flowing powder of particles with chemical agent in its crystalline form associated with polymer until a blend is formed. However, the permitting and agitating or masticating steps can be performed in sequence or at overlapping times (as set forth in claim 11).

The only "order" requirement is that the separating step be performed after the permitting step. That is, in the practice of this invention, the functional groups on the crystalline chemical agent and the functional groups on the polymer are permitted to associate with one another when they are combined in the presence of supercritical fluid to form a blend which is masticated. Once the blend is formed in the permitting step is performed, the separating step can be performed (as is specifically set forth in claim 1). The separating step can be performed before, during or after the agitating or masticating step, and as such, no additional sequential reference is required in claim 1 than is already present in the claim.

In view of the above, the rejection for indefiniteness should be withdrawn.

Claims 1-29 and 31 have been rejected improperly under 35 U.S.C. 102(b) or 35 U.S.C. 103 over either U.S. Patent 5,766,522 to Daly or U.S. Patent 5,548,004 to Mandel

At the outset, the Examiner will recognize that for an anticipation rejection to be supportable, every element of the claimed invention must be found in the prior art reference.

In this case, the Examiner has admitted that not every element can be found in the prior art references. For example, in the sentence bridging pages 7 and 8 of the office action, the Examiner states Mandel may have applied a similar agitation device, and in the second to last sentence in paragraph 12 on page 8 of the office action, the Examiner states agitating or masticating may be routinely needed by each of Daly and Mandel. In short, neither Daly nor Mandel teach these steps. Therefore, a rejection under 35 U.S.C. 102(b) is simply improper and should be withdrawn.

Furthermore, the Examiner's quotation of the MPEP that unexpected results "cannot" form a basis for rebutting an anticipation rejection does not apply in the present case, because, as admitted by the Examiner, neither of the Daly or Mandel references teach all of the recited steps of the claims.

Moreover, none of the claims would be obvious over either Daly or Mandel. As will be recognized by the Examiner, neither Daly nor Mandel teach or suggest producing a free flowing powder comprised of particles including chemical agent in crystalline form where the chemical agent is associated with polymer as is required in claim 1.

The invention describes a process for producing a free flowing powder comprised of particles including a chemical agent in its crystalline form associated with at least one polymer. Page 4 of the application at lines 7-19 discusses the formation of free flowing powders where the particles are polymer coated chemical agent particles. Page 12 of the application discusses free flowing powders being formed in Examples 1-3 of the application (see lines 18-19). Tables 2 and 3 of the application and the text on pages 13 and 14 of the application demonstrate that free flowing powders are created when the chemical agent associates with a polymer, but not when polymer does not associate with the chemical agent. Figure 1 of the application illustrates an example of the claimed process where polymer and chemical agent are combined in the presence of a supercritical fluid (carbon dioxide), the functional group on the chemical agent in crystalline form is permitted to associate with functional groups on the polymer backbone to form a blend (this being aided by pressurizing and heating), the blend is agitated or masticated to produce a free flowing powder comprised of particles including the chemical agent in crystalline form associated with the polymer, and the supercritical fluid is separated by cooling and de-pressurizing.

Contrary to the Examiner's position in paragraph 13 of the rejection, claim 1 requires that the agitating or masticating step produce

a free flowing powder
which is comprised of particles
that include chemical agent in crystalline form
which are associated with polymer

Tables 2 and 3 of the application show that this cannot be achieved when the chemical agent is not associated with the polymer. In operation, the chemical agent becomes associated with the polymer and assumes its crystalline form, and then is fragmented or fractured through agitation or mastication, thereby creating particles of the chemical agent with fluoropolymer associated therewith.

Neither Mandel nor Daly show production of a free flowing powder comprises of particles including said chemical agent in its crystalline form associated with said at least one polymer. Specifically, Mandel pertains to preparing coating materials, and as the Examiner has noted Mandel at most shows working up the polymerization product and does not show formation of free flowing powder which includes the chemical agent associated with the polymer. Daly describes production of a powder coating, not a free flowing powder which includes a chemical agent in crystalline form associated with a polymer. The Examiner's statement in paragraph 11 is understood to be an admission that neither Mandel or Daly show a free flowing powder of particles of chemical agent in crystalline form associated with polymer, but, at most show powder coatings only. No crystallinity of a chemical agent is discussed in Mandel or Daly, and crystallinity is not a matter of "degree" as suggested by the Examiner in paragraph 14 of the office action. By having the blend have crystalline chemical agent associated with polymer, the blend is able to be broken up by agitation or mastication to form particles of crystalline chemical agent with polymer associated therewith (breaking the blend apart can occur very easily by fracturing the crystals).

In view of the above, the claimed process is not anticipated by and is not obvious over either Mandel or Daly. Neither reference teaches a mastication step. Neither reference shows having a chemical agent that is in crystalline form. Neither reference shows a free flowing powder being formed which includes particles of crystalline chemical agent associated with polymer. The claimed process produces a valuable material-a free flowing powder of crystalline chemical agent associated with polymer-which can be molded, extruded, or processed by other means to produce articles which have uniform attributes. Neither Mandel nor Daly suggest making such a material, and the processes in fact do not in fact make such a material. In view of the above, the rejections lodged under 35 U.S.C. 102 and 103 should now be withdrawn.

In view of the above, it is respectfully requested that the application be reconsidered, that claims 1-29 and 31 be allowed, and that the application be passed to issue.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

A provisional petition is hereby made for any extension of time necessary for the continued pendency during the life of this application. Please charge any fees for such provisional petition and any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 50-2041.

Respectfully submitted,

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